NATIONAL METEOROLOGICAL SERVICES AGENCY
TEN DAY AGROMETEOROLOGICAL BULLETIN
P.BOX 1090 ADDIS ABABA TEL 512299 FAX 517066 E-mail **nmsa@ethionet.et**

1-10 July 2008 Vol. 18 No.27 **Date of issue July14, 2008**

SUMMARY

During the third dekad of June 2008, normal Kiremt rainfall activities observed over western half of country, the eastern parts of Meher growing areas of the country faced moisture deficiency. Normal to above normal dekadal rainfall was observed over western Tigray, western and central Oromia, Benshangul-Gumuz, Gambela, western and central Amhara and northern SNNPR. The situation could have a positive impact for Meher agricultural activities, for crop at different phonological stages. In addition, western and northwestern parts of the country experienced heavy rainfall that caused damage on crops in line with this Senkata reported damage on Tomato, Shambu on Onion and Potato crops and Chagni on Maize at emergence stage.

During the first dekad of July 2008, better rainfall distribution observed over most parts of seasonal rainfall benefiting areas. This situation could have a significant contribution for Meher agricultural activities and crops, which were at different phenological stages. Some areas of northwestern, western, central parts of Ethiopia exhibited heavy fall ranging from (30-73) mm in one rainy day. To mention some of them which recorded above 40 mm, Dilla, Gondar, Aykel, Bullen, Kibre Mengist, Dangla, Bui, and Gimbi exhibited 40.2, 41.0, 42.4, 43.2, 48.4, 48.8, 53.5 and 72.9 mm of rainfall respectively in one rainy day. Thus this condition resulted in crop damage in some areas. Shambu recorded damage on crop field of maize crops and onion due to heavy fall. Awassa and Gondar reported damage on trees and branch of trees due to heavy fall. And Ziway reported damage on livestock due to floods.

1. WEATHER ASSESSMENT

1.1 1-10 July, 2008

1.1.1 RAINFALL AMOUNT (Fig.1)

Parts of western and pocket area of central Oromia, parts of western and southwestern Amhara, northern Benshangul-Gumuz and eastern Gambela received 100-200 mm rainfall. Much of SNNPR and Tigray, parts of central, western and southern Oromia, eastern Gambela and northwestern and southern Amhara and margin of southern half of Benshangul-Gumuz experienced 50-100 mm rainfall. Much of Gambela, parts of southern, eastern and western Oromia, eastern Amhara, eastern Tigray, western Afar and southern half of Benshangul-Gumuz exhibited 25-50 mm rainfall. Parts of eastern Tigray, eastern Amhara, eastern and southern Afar, northwestern Somali, eastern and southern Oromia and southern SNNPR received 5-25 mm rainfall. The rest parts of the country exhibited little or no rainfall.

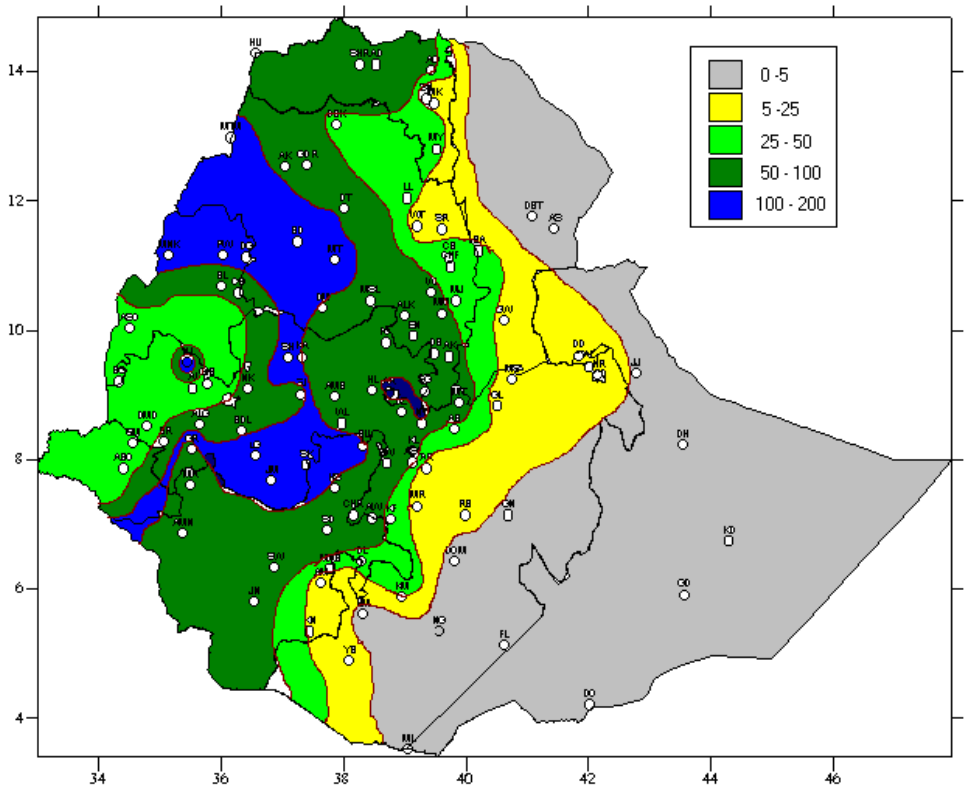

Fig 1. Rainfall distribution in mm (1-10 July 2008)

1.1.2 RAINFALL ANOMALY (Fig. 2)

Gambela, Afar, much of Somali, parts of western Benshangul-Gumuz, western, southern and southeastern Oromia, eastern Amhara and eastern Tigray received below normal to much below normal rainfall. The rest parts of the country exhibited normal to above normal rainfall.

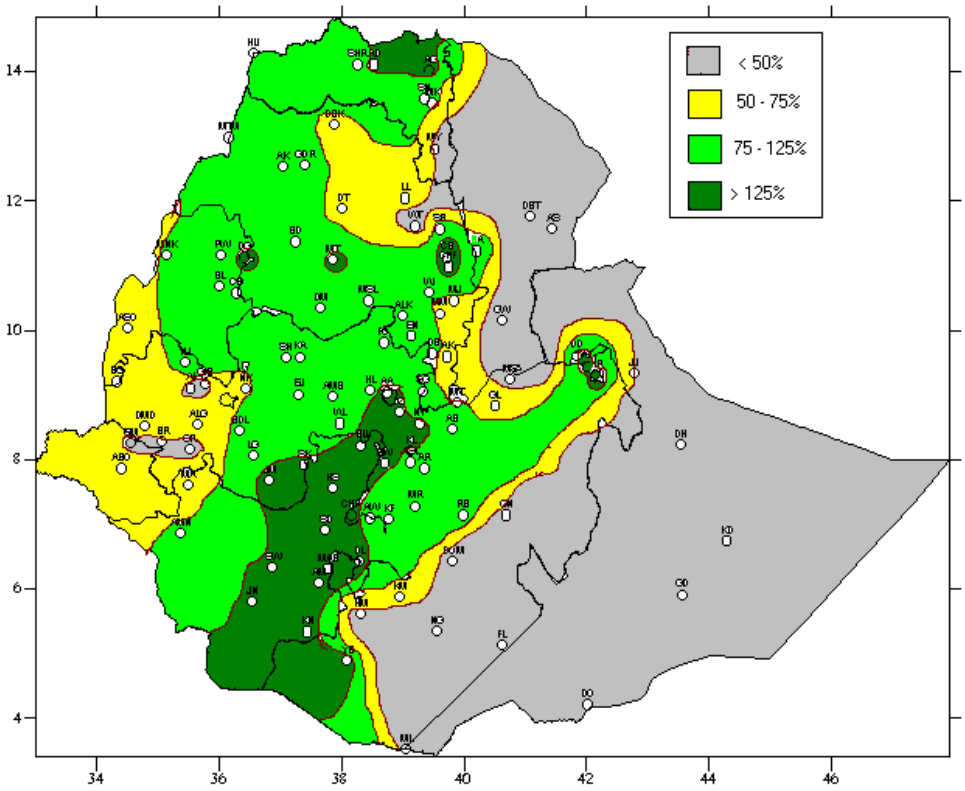

Fig.2 Percent of normal rainfall (1-10 July 2008)

Explanatory notes for the legend:
<50 -- Much below normal
50—75% -- below normal
75—125% --- Normal
> 125% ---- Above normal

1.1.3 TEMPERATURE ANOMALY

Some stations recorded extreme maximum temperature greater than 35^{o}C for 4 -10 days. Meisso, Nura era, Cheffa, Dire Dawa, Showa Robit, Methara, Mille, Semera, Assayta, Dubti, and Gewane recorded extreme maximum temperature as high as 36.0, 36.0, 36.5, 38.0, 38.0, 38.5, 44.0, 44.5, 44.8, 45.0, and 46.3 ^{o}C respectively.

2. WEATHER OUTLOOK FOR THE SCEOND DEKAD OF JULY 2008

On the second dekad of July the Kiremt rain producing systems have better strength and intensification across the seasonal rain benefiting areas. As a result, the Kiremt rain benefiting regions such as, west and central Tigray, Benshangul-Gumuz, west and central Oromiya, Gambela and northern half of SNNPR will have normal to above normal rain showers. There are likely to fall heavy rain showers at their some places. Moreover, eastern Tigray, and Amhara, Afar, eastern Oromya including Bale Zone, Dire Dawa, Harari, northern Somali, southern SNNPR and southern highlands of Oromiya will get close to normal rain showers. On the other hand, southern lowlands of Oromiya and Somali anticipate dry weather conditions with a possibility of patches of clouds at some places.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

Better rainfall distribution observed over most parts of seasonal rainfall benefiting areas. This situation could have a significant contribution for Meher agricultural activities and crops, which were at different phenological stages. Some areas of northwestern, western, central parts of Ethiopia exhibited heavy fall ranging from (30-73) mm in one rainy day. To mention some of them which recorded above 40 mm, Dilla, Gondar, Aykel, Bullen, Kibre Mengist, Dangla, Bui, and Gimbi exhibited 40.2, 41.0, 42.4, 43.2, 48.4, 48.8, 53.5 and 72.9 mm of rainfall respectively in one rainy day. Thus this condition resulted in crop damage in some areas. Shambu recorded damage on crop field of maize crops and onion due to heavy fall. Awassa and Gondar reported damage on trees and branch of trees due to heavy fall. And Ziway reported damage on livestock due to floods. For **crop phenological report please refer table1.**

The analysis of moisture status (the relation ship between dekadal rainfall and the dekadal total reference evapotranspiration) as indicated in fig3. Much of western half of the country as well as central exhibited moist to humid moisture condition. This condition favors the ongoing Meher agricultural activities. Besides, eastern Amhara, northern Somali, southern SNNPR, eastern Oromia experienced moderately dry to dry moisture condition. While the rest parts of the country experienced very dry moisture condition.

.

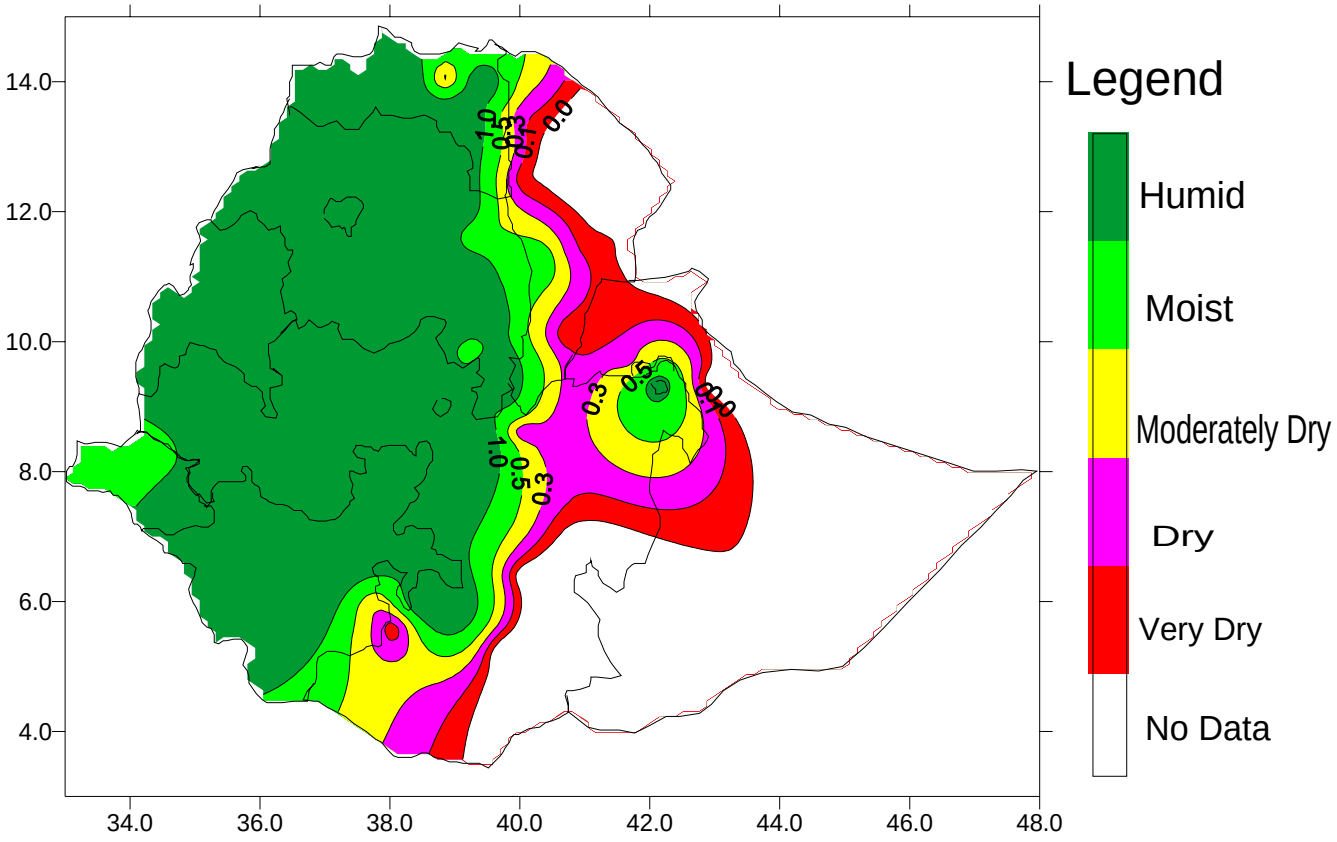

Fig1. **Moisture status for July 1-10/2008**

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

The anticipated normal to above normal rainfall over western and central Amhara, western and central Tigray, Benshangul-Gumuz, western and central Oromia, Gambela, and northern half of SNNPR would create favorable condition for sowing activities of cereal crops like (Teff and wheat) and pulse crops in areas of central (Adama, Arsi Robe, Bui, Woliso) western (Assosa, Shambu). Besides it would have a positive contribution for the water requirement of the existing crops, However, the expected heavy fall together with hail storm over some areas of the aforementioned areas would have a negative impact on crop fields particularly over low-lying areas and near the river banks. Thus, proper attention should be undertaken to minimize the risk. Moreover, the expected near normal rainfall over eastern Tigray, eastern Amhara, Afar, eastern Oromia, Bale zone, Harari, northern Somali, southern parts of SNNPR and highlands of southern Oromia would favor the ongoing seasons agricultural activities and the existing crops, perennial and long cycle crops as well. Besides, the expected dry weather situation over southern Oromia and southern Somali lowlands could have a negative impact for the availability of pasture and drinking water for pastoral and ago pastoral areas. Therefore proper attention should be taken to minimize the risk due to the expected deficient moisture condition.

Table 1. Crop Phenological report for the first dekad of July 2008

Station name	Region	Zone	Woreda	Major Crops			Phases		
				1	2	3	1	2	3
Aira	Oromia	Wellega		Maize	-	-	-	-	-
Aris Robe	Oromia	Mirab Arsi	Robe	-	-	-	-	-	-
Alemkema	Amahara	Semen Shoa	Alemkema	-	-	-	-	-	-
Assosa	Benishagul	Assosa	Assosa	-	-	-	-	-	-
Ayehu	Amahara	Mirab Gojam	Ankosha	Maize	-	-	Fl	-	-
Bedelle	Oromia	Illubabor	Bedlle	Maize	-	-	-	-	-
Bullen	Benishagul	Metekel	Bullen	Maize	Millet	-	-	Tl	-
Bui	SNNPR	Guarage	Sodo	-	-	-	-	-	-
Chagni	Amahara	Awi	Guagnua	Maize	Millet	Nug	Nl	-	-
Chira	Oromia	Jimma	Gera	Maize	-	-	Wr	-	-
Dangila	Benishagul	Awi	Dangila	Maize	Teff	-	Nl	Em	-
Debre Tabor	Amahara	Dabub Gonder	Debre Tabor	-	-	-	-	-	-
Debre Birhan	Amahara			Barley			Tl		
Dolomena	Oromia	Bale	Mena	Maize	Teff	-	Fr	R	-
Dilla	SNNPR			Millet	-	-	-	-	-
Enewary	Amahara	Semen Shoa	Mortenajiru	-	-	-	-	-	-
Fitche	Oromia	Semen Shoa	Girarjarso		-	-	-	-	-
Gelemeso	Oromia	Mira Haraghe	Habro	Maize	-	-	Ta	-	-
Ghion				Maize	Nug	-	Fl	Bu	-
Gimbi	Oromia				-	-	Ta	-	-
Hossaina	SNNPR	SNNPR	Lemu	Maize	-	-	Fl	-	-
Kachise	Oromia	Mirab Shoa	Gindeberet	-		-	-	-	-
Lalibela	Amahara	Semen Wollo	Lasta	-	-	-	-	-	-
Limugent	Oromia	Jimma	Limukosa	-	-	-	-	-	-
Majate	Amahara	Semen Shoa	Mizan antakiya	-	-	-	-	-	-
Mehal Meda	Amahara	Semen Shoa	Gira mider	-	-	-	-	-	-
Nedjo	Oromia	Mira Wollega	Nedjo	Maize	Sorghum		Fl	Ta	
Pawe	Benishagul	Metekele	Pawe liyu	-		-	-	-	-
Shaura	Amahara	SemenGonder	ALEF.T	Maize	-	-	-	-	-
Shambu	Oromia	HoroWollega	Horo	-	-	-	-	-	-
Shire	Tigiray	Mirab Tigray	Endasilasie	-	-	-	-	-	-
Sirinka	Amahara	Semen Wollo	Habru	-	-	-	-	-	-
Sokoru	Oromia	Jimma	Sokoru	Maize	-	-	Ta	-	-
Shola Gebeya	Amahara	Semen Shoa	Hagaramariam	-	-	-	-	-	-
Wagel Tena	Amahara	Semen Wollo	Delanta		-	-	-	-	-
Ziway	Oromia	Misrak Shoa	Jidocombolcha		-	-	-	-	-

Key :

P/S= Plant/Sow
Em=emerge
Tl=Third leaf
Sl=Seventh leaf
Yr=Yellow ripe
Nl= Ninth leaf
El= Elongation
Ta = Tassel
Ti=Tiller
Sh=shoot
Bs= Berry soft
Bh= Berry hard
Ph= Pin heading
Ea= Earing
He= Heading
Bu= budding
Fl=Flower
R = ripeness
Cr= Consumer ripeness
Gr= Green ripeness
Wr= Wax ripeness
Yg r= yellow green ripeness
Lgr =light green ripeness
Dr= dark ripeness
Fr= Full ripeness
H =Harvested
- Data not available